

CLAIMS:

1. A page binding device for receiving and binding pages from an inkjet printhead assembly, the device comprising:

5 a support tray for receiving and stacking printed pages to form a bound document;
an adhesive applicator for applying adhesive to the printed pages;
a page conveyor for sequentially feeding pages from the printhead assembly to the support tray via the adhesive applicator; and,
an air flow generator for generating an air flow that prevents the pages from
10 contacting the adhesive applicator; wherein,
the adhesive applicator is adapted to eject adhesive onto the pages as they are fed to the support tray.

15 2. The page binding device of claim 1 wherein the device has a vibrator interacting with the tray so as to induce vibration therein to assist in alignment of the pages of the stack.

20 3. The page binding device of claim 1 wherein the tray has a base including at least one corner portion that is lower than other portions of the base.

4. The page binding device of claim 3 wherein the tray includes at least two side walls extending substantially perpendicularly to each other and against which perpendicular edges of the pages bear for alignment of the pages within the stack.

25 5. The page binding device of claim 2 wherein vibration of the tray is dampened by dampers.

6. The page binding device of claim 1 wherein the tray is supported by a frame.

30 7. The page binding device of claim 6 wherein the tray is suspended from the frame.

8. The page binding device of claim 6 wherein dampers extend from the tray to the frame.

9. The page binding device of claim 2 wherein the vibrator is a subsonic vibrator.

10. The page binding device of claim 3 wherein the tray has a press device for
5 compressing the pages, and the base of the tray is of adjustable height relative to the press
device to ensure that an upper page of the stack is situated at a predefined level for
interaction with the press device.

11. A method of binding pages from a printer into a bound document, the method
10 comprising:

applying an adhesive to the printed pages with an adhesive applicator;

sequentially conveying the pages from the printer to a support tray via the adhesive
applicator; and,

generating an air flow that prevents the pages from contacting the adhesive
15 applicator; wherein,

the adhesive applicator is adapted to eject adhesive onto the pages as they are fed to
the support tray.

12. The method claim of 11 wherein the tray has a press device for compressing the
20 pages, and the base of the tray is of adjustable height relative to the press device to ensure
that an upper page of the stack is situated at a predefined level for interaction with the press
device.

13. The method of claim 11 wherein said press device includes a plurality of semi-
25 circular disks each spaced apart and fixedly mounted to a rotatably driven shaft.

14. The method of claim 11 wherein the device has a vibrator interacting with the tray
so as to induce vibration therein to assist in alignment of the pages of the stack.

15. The method of claim 14 wherein the tray has at least two side walls extending
30 substantially perpendicularly to each other, such that perpendicular edges of the pages bear
against the side walls to align the pages within the stack.

16. The method of claim 14 wherein said vibrator is a subsonic vibrator and the induced vibration is damped by dampers.

5 17. The method of claim 11 comprising the step, prior to the step of delivering pages, of supporting the tray by a frame.

18. The method of claim 17 wherein the step of supporting the tray comprises suspending the tray from the frame.

10 19. The method of claim 17 wherein the step of supporting the tray comprises providing dampers such that the dampers extend from the tray to the frame.

20. The method of claim 11 wherein the step of inducing vibration comprises inducing vibration by the vibrator wherein the vibrator is a subsonic vibrator.

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21. The method of claim 14 comprising the step of adjusting the height of the support surface relative to the press device, thereby ensuring that an upper page of the stack is situated at a predefined level for interaction with the press device.

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